

XXXIX.—*On the Birds collected by Mr. Alexander Whyte, F.Z.S., during his Expedition to the Nyika Plateau in North Nyasaland.* By Captain G. E. SHELLEY, F.Z.S. *With an Introduction by P. L. SCLATER.*

(Plates XI. & XII.)

I. INTRODUCTION. (By P. L. SCLATER.)

THE collections of birds from the Protectorate of Nyasaland previously described in this journal have all been formed in the country south of Lake Nyasa, mostly in the district called the "Shiré Highlands," of which a chart has been given in 'The Ibis' for 1894, p. 462. Sir Harry Johnston, shortly before he left Zomba in 1896, arranged that Mr. Whyte should make an expedition into the high district called the Nyika Plateau, situated some 300 miles further north, on the west coast of the north portion of Lake Nyasa, to ascertain how far the fauna and flora of this part of the Protectorate corresponded with those of the southern portion. This expedition was successfully carried out by Mr. Whyte in May, June, and July, 1896, and the collection of birds now described by Capt. Shelley was formed on that occasion. Mr. Whyte has published an account of his journey in several articles in the 'British Central Africa Gazette' (from Oct. 15th, 1896, to March 15th, 1897), from which I extract the following particulars:—

Mr. Whyte left Zomba on May 14th, 1896, taking with him his two hunters, Abdallah and Suleiman, two intelligent natives (Atongas), and three personal servants, all of whom could act as hunters and skimmers if required. He descended to the Shiré at Mpimbi, and thence proceeded up the river in the 'Dove' to Fort Johnston, which he found much improved since his last visit, many new buildings having been erected and the avenues of trees having made great progress. At noon on May 26th the party transhipped into the 'Pioneer,' and had a pleasant run to Monkey Bay, where collecting was begun, and Sea-Eagles (*Haliaëtus vocifer*) were found nesting on an island at the mouth of the harbour. Next day Kota-Kota was reached in the evening. Here there

was excellent waterfowl shooting (Ducks, Geese, and Teal) on the low swampy shores of the peninsula, and hippos. were numerous. After a rough run, Nkata Bay (about  $11^{\circ} 50'$  S. lat.) was reached on the 22nd, and Ruarwe, some 40 miles further north, on the following day. At Ruarwe the 'Pioneer' left the party, as it had been planned to ascend the plateau from this station. But difficulties about portage rendered it necessary to proceed along the coast to Pasilao, where fresh men were obtained, and subsequently to Florence Bay, the port of the Mission-station of Kondowe, just under Mount Waller. At Kondowe a most hearty reception from Dr. Laws and his companions was met with, and an excellent basis established for penetrating into the interior.

From Kondowe two days of stiff climbing brought Mr. Whyte and his companions to the highest range at the south end of the Nyika Mountains. Here good collections of plants and birds were made, but the men suffered from cold and other complaints. Travelling to the north-west, Mr. Whyte visited the native villages Mayawa and Khala, but, finding difficulties about guides, finally determined to descend to the coast, and to push on along the plains to Karonga, the northernmost station of the Protectorate on the Lake, so as to try to penetrate the range again from that end. The arid, sandy plain now traversed was covered with stunted acacias, euphorbias, and short grass, among which numbers of bushbucks and hartebeests were seen, as also the spoor of larger antelopes. The party passed through the native villages of Machifrantu, Pamali, and Kapembi. At the last place there is a school belonging to Dr. Kerr Cross's Mission. On arriving at Karonga, Mr. Whyte took up his quarters with Mr. Taylor, the Collector of the North Nyasa district, whose house was three miles further north, on the Kambwe Lagoon near a small well-sheltered bay.

After a few days' rest at Karonga, Mr. Whyte started again for the hills on June 19th, leaving the collections already made under Mr. Taylor's care, and at 10 A.M. reached Mpata, the site of the stockade of the slaver Mlozi, captured

and burnt by Sir Harry Johnston six months previously. Here he diverged from the regular Karonga-Tanganyika route towards the south and entered the hills, reaching Chifungu's in the evening. The hills now became higher and only sparsely clad, and much spoor of large and small antelopes was seen. The next village was Chasari's, on the banks of a dried-up stream. This was the last inhabited spot, and the way was continued by an elephant-path to an encampment under a shady grove of bamboos on the banks of the Wyie River. Here some interesting birds were collected, and amongst others a bright little Kingfisher, "resembling *Ceyx tridactyla* of India." From "Bamboo Camp" the Wyie River was followed for some time, after which severe climbing brought the party to a spot on one of the spurs of the mountains immediately under the Mpanda peak, where it was resolved to stop, Mr. Taylor being knocked up by fever. The view from this spot was very grand, majestic mountain scenery catching the eye in all directions, whilst on one side the silvery expanse of Lake Nyasa showed up splendidly in the sunrise. The next morning was fine, and, after 500 more feet of steep climbing, the plateau of the grand Nyika Range was reached at noon. Mr. Whyte describes his position as follows:—

"At the spot where we first reached the plateau of the Nyika Mountains it was quite narrow, some 500 yards from east to west, a sort of saddle immediately to the south of the Mpanda peak. The descent on the west side was less steep than on the east, the one we had climbed, and the view extended over deep wooded valleys and grasslands, backed in the distance by the Angoni Mountains and plateau. The lichen-covered granite peak, towering some 600 feet above us, resembled a blunt sugar-loaf, and not a forked or double wedge-shaped mountain, as seen from the plains.

"What struck me as most remarkable was the sudden change in the climate and flora. Hitherto we had not found it disagreeably cold, and until we reached the plateau there was little or no sign of an Alpine flora with the exception of a few helichrysums and other temperate-zone Compositæ.

At our last camp, about 1000 feet below us, and which we could now look down on, the temperature stood at 72° Fahr. in the shade at noon; here it stood at 60° Fahr., with a sharp north-east wind blowing."

Travelling along the plateau in quest of water and collecting the Alpine plants, Mr. Whyte discovered a small spring in a ravine, and on the 24th of June camped here (Camp No. I.) after five days' march from Karonga. The spot, however, proved to be cold and damp, and after three days' sojourn Mr. Whyte moved about five miles further on into a sheltered little vale furnished with wood and water, where he resolved to establish himself more permanently (Camp No. II.). Huts were built for the men, and the tent was pitched in their centre, so that all were protected from the dense mist, mizzling rain, and cold winds, which usually prevailed here until 9 A.M.

After settling here, all hands were told off as collectors, and an amusing description is given by Mr. Whyte of the various modes in which they were employed in gathering together the natural objects of every description. The display of wild flowers on these heights was most gorgeous. It was a perfect paradise for the botanist, new plants cropping up in all directions.

On June 27th the highest point of the range, which was named "Centre Peak," was ascended, and found to consist of two confused heaps of lichen-covered granite blocks. Its height was calculated at nearly 8000 feet above the sea-level. Near the summit Mr. Whyte captured an example of a new mole-rat (*Georhynchus whytei*, Thomas).

The prominent feature of this high mountain district was the abundance of rodents and other small mammals. Of these Mr. Thomas has already described the principal novelties in a communication to the Zoological Society on the 4th of May last\*, and will give a complete account later on. Birds were also numerous and of interest, as will be seen by Capt. Shelley's report on them. Mr. Whyte specially mentions a large Crested Hawk-Eagle (*Spizaetus coronatus*) with

\* See P. Z. S. 1897, p. 430.



a spread of wings of almost six feet, two Francolins (*Franco-linus johnstoni* and *F. shelleyi*) found in the short grass of the plateau, a Raven (*Corvultur albicollis*), and twelve Passeres new to him, as having been met with here during the sixteen days of his stay, after which he returned to Mr. Taylor's bungalow near Karonga.

After a short rest here, Mr. Whyte started on July 17th, in company with Dr. Kerr Cross, for an expedition into the Tanganyika Plateau, the object being to examine the little-known Masuku Range, which extends from that plateau near Fort Hill towards Lake Nyasa. The same road was taken as on the former expedition as far as Mpata, whence the old Stevenson road was followed to Mwanyesia's village near the entrance to the pass. Hence an early start was made for the stiff climb up the plateau along the much-frequented route to Tanganyika, and the stockaded village of Mwiniwanda was reached at 4 P.M. This was a miserable place surrounded by swamps, and the travellers were glad to push on to Chirenji, formerly one of the Livingstonia mission-stations, but now abandoned on account of its unhealthiness. Three hours beyond, on the plateau, is the strong and well-appointed station of Fort Hill, belonging to the British Central African Administration, recently built by Mr. Yule, and commanded by that able officer, who has made valuable contributions to our knowledge of the mammal-fauna of the surrounding district. Here the party remained some days, and large additions were made to the collections.

On July 22nd Mr. Whyte started on his return journey, taking the same road as far as Chirenji, and thence ascending the Masuku Range. After a few hours' hard climb, the crest of the mountain was reached about four miles east of the highest point, and the camp was pitched under some fine trees at the edge of one of the patches of large virgin forest. In this district, which is locally known as the "Kekombe" country, the climate at this season was delightful. Its height was estimated at from 6500 to 7200 feet. The camp was changed from the north-east to the south-west end of the plateau before the party returned to Karonga.

As will be seen by Capt. Shelley's carefully prepared list, excellent results were obtained in the Class of Birds. The collection brought back consists of 345 specimens belonging to 155 species, 45 of which are now recorded for the first time from Nyasaland, and 4 are described as new to science.

With regard to the extension of our knowledge of the geographical distribution of the Nyasan avifauna afforded by this collection, the following summary will show the results:—The local forms are fourteen; sixteen species here attain their northern limit in Eastern Africa, twenty their southern limit, and seven their eastern limit. It will be obvious, therefore, that the expedition has added largely to our knowledge of the Nyasan avifauna.—P. L. S.

## II. LIST OF THE BIRDS. (By Captain G. E. SHELLEY.)

### 1. NECTARINIA CUPREONITENS.

*Nectarinia cupreonitens*, Shelley; id. B. Afr. i. p. 2, no. 8.

*Nectarinia famosa* (nec Linn.), Reichen. Vög. Deutsch-Ost-Afr. p. 212.

*Nectarinia subfamosa*, Salvad. Ann. Mus. Civ. Gen. 1884, p. 138.

*Nectarinia aeneigularis*, Sharpe, Ibis, 1891, pp. 444, 590.

Nyika Plateau and the Masuku Range, between 6000 and 7000 feet, June and July. The three adult males are all in full plumage. They belong to a small mountain-form of *N. famosa*, Linn., which ranges over Eastern Africa from Nyasaland to Abyssinia. Birds of this species in full plumage measure 8 inches in total length, while *N. famosa* measures 10.5; but the best distinguishing character is in the bill, which is much more curved and slightly shorter than in *N. famosa*.

### 2. NECTARINIA KILIMENSIS.

*Nectarinia kilimensis*, Shelley; id. B. Afr. i. p. 2, no. 14; Reichen. Vög. Deutsch-Ost-Afr. p. 212.

*Nectarinia fliola*, Hartl. J. f. O. 1890, p. 150.

*Nectarinia gadowi*, Bocage, Journ. Lisb. 1892, p. 256.

Nyika Plateau, June. Two adult males and a female. This species ranges northward to the Equator and westward to Angola.

### 3. CINNYRIS MICRORHYNCHUS.

*Cinnyris microrhynchus*, Shelley; id. B. Afr. i. p. 33, no. 28; Reichen. Vög. Deutsch-Ost-Afr. p. 211.

Songue, on the northern shores of Lake Nyasa, June. One adult male in full plumage. Nyasaland is the most southern known locality for this species, which ranges over Eastern Africa to the Equator.

### 4. CINNYRIS FALKENSTEINI.

*Cinnyris falkensteini*, Reichen.; Shelley, B. Afr. i. p. 3, no. 36; id. Ibis, 1893, p. 16, 1894, p. 13, 1896, pp. 180, 233.

Nyika Plateau and Kombi, 6000 to 7000 feet. One nestling in June; two in full adult male plumage and a female in July. This is another of the Sunbirds which belong to Eastern Africa northward from Nyasaland.

### 5. CINNYRIS LUDOVICENSIS.

*Cinnyris ludovicensis* (Bocage), Shelley, B. Afr. i. p. 4, no. 40; Sharpe, B. S. Afr. p. 830.

*Nectarinia intermedia*, Bocage, Journ. Lisb. 1880, p. 236.

*Cinnyris erikssoni*, Trimen, P. Z. S. 1882, p. 451, pl. 32.

Nyika Plateau, June. Four specimens in full adult male plumage. It is interesting to find this Sunbird (which replaces *C. afer* and *C. chalybeus* north of the Cunene River in the Portuguese West-African colony) also occurring in Nyasaland.

### 6. CINNYRIS PREUSSI.

*Cinnyris preussi*, Reichen.; Shelley, B. Afr. i. p. 4, no. 44.

Kombi (Masuku Range), 7000 feet, July. A full-plumaged male. This species was hitherto known only from Camaroons. It belongs to the group of *Cinnyris* which may be characterized by having the breast pale (never blackish), the entire head uniform green, the tail square, and a broad non-metallic scarlet breast-band. The following key may assist in recognizing the 7 known species of this group:—

a. A narrow metallic blue collar; upper tail-coverts blue.

a'. Abdomen ashy stone-colour.

a<sup>2</sup>. Larger: wing 2.5 inches; scarlet pectoral band slightly paler and broader.

a<sup>3</sup>. Culmen 1.1; metallic pectoral band more violet. . . . .

*C. afer.*

b<sup>3</sup>. Culmen 0.65; metallic pectoral band bluer.

*C. ludovicensis.*

b<sup>2</sup>. Smaller: wing 2.25; scarlet pectoral band slightly darker and narrower. Culmen 0.9 .

*C. chalybeus.*

b'. Abdomen browner and shaded with olive-yellow.

c<sup>2</sup>. Abdomen paler and yellow; metallic pectoral band and upper tail-coverts with a greenish shade. Culmen 0.75, wing 2.1 . . . .

*C. mediocris.*

d<sup>2</sup>. Abdomen darker; metallic pectoral band and upper tail-coverts violet-blue.

c<sup>3</sup>. Larger: culmen 0.85, wing 2.25; back greener . . . . .

*C. preussi.*

d<sup>3</sup>. Smaller: culmen 0.65, wing 2.05; back bluer . . . . .

*C. reichenowi.*

b. No metallic blue collar; upper tail-coverts green, like the back. Culmen 0.65, wing not more than 2 inches . . . . .

*C. chloropygius.*

7. *CHALCOMITRA GUTTURALIS.*

*Chalcomitra gutturalis* (Linn.), Shelley, B. Afr. i. p. 4, no. 49; id. Ibis, 1893, p. 17, 1894, p. 14.

Karonga, Kombi, and Fort Hill, July. Two full-plumaged males, a female, and an immature bird.

8. *ZOSTEROPS ANDERSSONI.*

*Zosterops anderssoni*, Shelley; id. B. Afr. i. p. 7, no. 88; id. Ibis, 1896, p. 180.

Nyika Plateau, June. One adult female, similar to the male previously recorded from Nyasaland.

a. Throat and under surface of body uniform yellow.

Wing 2.35 inches . . . . . *Z. anderssoni.*

b. Throat and under surface of body yellow, passing into green on the flanks. Wing 2.3 inches; white ring round the eye narrow . . . . .

*Z. virens.*

9. *ZOSTEROPS VIRENS.*

*Zosterops virens*, Bp.; Shelley, B. Afr. i. p. 7, no. 91; Sharpe, B. S. Afr. pp. 325, 834; Gadow, Cat. ix. p. 182.

Mayawa village on the Nyika Mountain, 6000 feet, June.





12. *ÆGITHALUS CAROLI*.

*Ægithalus caroli*, Sharpe; Shelley, B. Afr. i. p. 10, no. 132; Gadow, Cat. viii. p. 71, pl. i. fig. 1.

*Anthoscopus caroli*, Sharpe, B. S. Afr. pp. 327, 834.

Karonga, June. A female. This species ranges through Damara-, Swazi-, and Matabele- into Nyasaland. It has been recorded by Dr. Hartlaub (Abhand. nat. Ver. Brem. 1891, p. 18) from Ussambiro (3° S. lat., 33° E. long.); but this specimen, obtained by Emin, is referred by Dr. Reichenow to *Æ. capensis* (Vög. Deutsch-Ost-Afr. p. 214, where the description certainly applies to *Æ. capensis*.)

13. *MOTACILLA LONGICAUDA*.

*Motacilla longicauda*, Rüpp.; Shelley, B. Afr. i. p. 11 no. 146; id. Ibis, 1893, p. 27, 1894, pp. 23, 472.

Kombi, Masuku Range, 7000 feet, July. One specimen.

14. *ANTHUS RUFULUS*.

*Anthus rufulus*, Vieill.; Shelley, B. Afr. i. p. 12, no. 165; id. Ibis, 1893, p. 27, 1894, p. 23, 1896, p. 238.

Nyika Plateau and Pasilao, on Lake Nyasa, June; Karonga and Songue, in North Nyasa, July. Of the nine specimens, four are labelled males and five females.

15. *MACRONYX CROCEUS*.

*Macronyx croceus* (Vieill.); Shelley, B. Afr. i. p. 13, no. 170; id. Ibis, 1893, p. 27, 1894, p. 23.

Fort Johnston, July. One full-plumaged male.

16. *EMBERIZA ORIENTALIS*.

*Emberiza orientalis* (Shelley); id. B. Afr. i. p. 18, no. 240; id. Ibis, 1893, p. 27, 1894, pp. 23, 472.

Nyika Plateau, June; Fort Hill, July. Three males and two females. *Range*. Eastern Africa, from Nyasaland to the Equator.

17. *FRINGILLARIA TAHAPISI*.

*Fringillaria tahapisi* (Smith); Shelley, B. Afr. i. p. 18, no. 246; id. Ibis, 1894, p. 23.

Karonga, North Nyasa, June. One female.

18. *PASSER DIFFUSUS*.

*Passer diffusus* (Smith); Shelley, B. Afr. i. p. 20, no. 268; id. Ibis, 1894, p. 22.

Nyika Mountains from 2000 to 7000 ft., and Karonga, June; Fort Hill and Songue, in North Nyasa, July. Three males and a female.

19. *POLIOSPIZA STRIATIPECTUS*.

*Poliospiza striatipectus*, Sharpe, Ibis, 1891, p. 258; Shelley, B. Afr. i. p. 21, no. 276.

Nyika Plateau, June. One male. I have compared this bird with the two typical specimens in the British Museum. This species apparently ranges through Eastern Africa from the Equator to Nyasaland, the type having been discovered by Mr. Jackson at Elgeyo in July 1890.

20. *SERINUS ICTERUS*.

*Serinus icterus* (Bonn. et Vieill.); Shelley, B. Afr. i. p. 21, no. 285; id. Ibis, 1894, p. 22.

Fort Hill, July. A pair of these birds.

21. *SERINUS WHYTHI*, sp. n. (Plate XI.)

Nyika Plateau, June. One specimen labelled female.

Upper parts brownish black, with broad pale edges to the feathers; the pale edges of the feathers of the crown and hind neck paler and yellower than on the back and wing-coverts; quills and tail-feathers edged with yellow; sides of head dark olive-brown, surmounted by a broad, well-marked, sulphur-yellow eyebrow; throat uniform sulphur-yellow, shaded with dusky brown towards the chin; crop and body yellowish buff with black shaft-stripes, broad and very distinct on the front and sides of the body, and narrow on the under tail-coverts; thighs and centre of abdomen uniform; under wing-coverts yellowish buff; quills slaty brown beneath, with paler inner margins: bill horn-colour; legs brown. Total length 6 inches, culmen 0.55, wing 2.8, tail 2.75, tarsus 0.85.

This species belongs to that section of *Serinus* in which the flanks are streaked; the forehead with no yellow patch;



J.G. Keulemans del. et lith.

SPERINUS WHITII.

the back and rump similar in colour, brown mottled with dusky centres to the feathers.

a. With no white frontal patch.

a'. A broad eyebrow and the throat yellow; sides of head uniform dark olive-brown . . . . . *S. whyti*.

b'. Head streaked with white; throat white . . . . . *S. striolatus*.

b. With a white frontal patch . . . . . *S. burtoni*  
and *S. albifrons*.

## 22. VIDUA PARADISEA.

*Vidua paradisea* (Linn.); Shelley, B. Afr. i. p. 23, no. 316.

*Steganura paradisea*, Shelley, Ibis, 1894, pp. 21, 471.

Songue, in North Nyasa, July. Three young birds.

## 23. UROBRACHYA AXILLARIS.

*Urobrachya axillaris*, Smith; Shelley, B. Afr. i. p. 24, no. 328; id. Ibis, 1894, p. 471.

Kota-Kota, on Lake Nyasa, June. One male in full plumage.

## 24. QUELEA QUELEA.

*Quelea quelea* (Linn.); Shelley, B. Afr. i. p. 25, no. 350; Sharpe, Cat. xiii. p. 257, pl. x. fig. 3 (head of male); id. B. S. Afr. p. 458.

Nyika Plateau and Karonga, July. Two specimens exactly similar, with no black on the head. One is, I consider, incorrectly labelled male.

## 25. CRYPTOSPIZA AUSTRALIS.

*Cryptospiza australis*, Shelley, Ibis, 1896, p. 184.

*Cryptospiza reichenowi* (nec Hartl.), Shelley, Ibis, 1893, p. 26, 1894, p. 471.

Kombi, Masuku Range, 7000 ft., July. One adult female.

## 26. SPERMESTES SCUTATUS.

*Spermestes scutatus* (Heugl.); Shelley, B. Afr. i. p. 28, no. 382; id. Ibis, 1894, p. 21.

Nyika Plateau. An adult male and a young bird.

## 27. SPERMESTES NIGRICEPS.

*Spermestes nigriceps*, Cass.; Shelley, B. Afr. i. p. 28, no. 383; Sharpe, Cat. xiii. p. 263; Reichen. Vög. Deutsch-Ost-Afr. p. 184.

*Spermestes rufodorsalis*, Peters, Sharpe, B. S. Afr. p. 456.  
Nyika Plateau, June. A fine adult male.

28. COCCOPYGIA DUFRESNII.

*Coccopygia dufresnii* (Vieill.) ; Shelley, B. Afr. i. p. 29,  
no. 391 ; id. Ibis, 1893, p. 26.

Nyika Plateau, June. One female. This is the most  
northern known range for the species.

29. GRANATINA ANGOLENSIS.

*Granatina angolensis* (Linn.) ; Shelley, B. Afr. i. p. 29,  
no. 397.

*Estrilda angolensis*, Shelley, Ibis, 1893, p. 26.

Nyika Plateau, June. An adult female.

30. LAGONOSTICTA RHODOPARIA.

*Lagonosticta rhodoparia*, Heugl. ; Shelley, B. Afr. i. p. 31,  
no. 424 ; id. Ibis, 1893, p. 26, 1894, p. 22.

Nyika Plateau, June. Adult male and female, and a  
young bird. Nyasaland is the most southern known locality  
for this species, which ranges northward to Bogosland in  
North-east Africa.

31. HYPARGUS NIVEIGUTTATUS.

*Hypargus niveiguttatus* (Peters) ; Shelley, B. Afr. i. p. 32,  
no. 444.

*Lagonosticta niveiguttata*, Shelley, Ibis, 1893, p. 27 ; 1894,  
p. 22.

Nyika Plateau, July. An adult male.

32. ANAPLECTES RUBRICEPS.

*Anaplectes rubriceps* (Sundev.) ; Shelley, B. Afr. i. p. 35,  
no. 478 ; id. Ibis, 1893, p. 24.

Fort Hill, July. One specimen, labelled male, in the same  
plumage as the type of *Sharpia ayresi* (Ibis, 1882, p. 353,  
pl. vii. fig. 2).

33. HYPHANTORNIS BERTRANDI.

*Hyphantornis bertrandi*, Shelley, Ibis, 1893, p. 23, pl. ii.,  
1894, p. 20 ; id. B. Afr. i. p. 39, no. 548.

Songue, in North Nyasa, June and July. Two apparently  
adult females of this species. This is one of the local species,



which has not been recorded from beyond the limits of Nyasaland.

34. *HYPHANTORNIS NIGRICEPS.*

*Hyphantornis nigriceps*, Layard; Shelley, B. Afr. i. p. 40, no. 561; id. Ibis, 1893, p. 23, 1894, p. 19, 1896, p. 237.

Fort Hill and Karonga, July. Two immature birds labelled male and female.

35. *ORIOIUS NOTATUS.*

*Oriolus notatus*, Peters; Shelley, B. Afr. i. p. 41, no. 570; id. Ibis, 1894, p. 19.

Nyika Plateau, 6000 to 7000 ft., Malosis 3000 ft., and Karonga. Three adult, and one young, males, and an adult female.

36. *ORIOIUS LARVATUS.*

*Oriolus larvatus*, Licht.; Shelley, B. Afr. i. p. 41, no. 572; id. Ibis, 1893, p. 22, 1894, pp. 19, 470, 1896, p. 236.

Nyika Plateau and Karonga, June, and Mpata, July. An adult male and female, and two immature birds.

37. *LAMPROCOLIUS SYCOBIUS.*

*Lamprocolius sycobius* (Licht.); Shelley, B. Afr. i. p. 43, no. 600; id. Ibis, 1893, p. 22, 1894, p. 19, 1896, p. 183.

One specimen not labelled.

38. *DILOPHUS CARUNCULATUS.*

*Dilophus carunculatus* (Gm.); Shelley, B. Afr. i. p. 46, no. 630; Sharpe, Cat. xiii. p. 61; id. B. S. Afr. p. 421; Reichen. Vög. Deutsch-Ost-Afr. p. 171.

South of Mount Waller, June. An adult female.

39. *CORVULTUR ALBICOLLIS.*

*Corvultur albicollis* (Lath.); Shelley, B. Afr. i. p. 46, no. 632; id. Ibis, 1893, p. 22.

Nyika and Masuku Mountains, July. Three males and one female.

40. *CORVUS SCAPULATUS.*

*Corvus scapulatus*, Daud.; Shelley, B. Afr. i. p. 46, no. 634; id. Ibis, 1894, p. 19.

Masuku Plateau, July. One female.

41. *DICRURUS AFER.*

*Dicrurus afer* (Licht.); Shelley, B. Afr. i. p. 47, no. 646; Reichen. Vög. Deutsch-Ost-Afr. p. 166.

*Buchanga assimilis* (Bechst.); Shelley, Ibis, 1893, p. 21; 1894, p. 18.

Karonga, June. An adult female.

42. *PRIONOPS TALACOMA.*

*Prionops talacoma*, Smith; Shelley, B. Afr. i. p. 49, no. 666; id. Ibis, 1893, p. 21, 1894, p. 471.

Nyika Plateau and lower down the mountain near Malosis at 3000 ft., and on the shores of the lake south of Karonga, June. One male and two females, all adult.

43. *CAMPOPHAGA NIGRA.*

*Campophaga nigra*, Vieill.; Shelley, B. Afr. i. p. 50, no. 675; id. Ibis, 1893, p. 20, 1894, p. 18.

Nyika Plateau; Ukala village, on the same mountain at 3000 ft.; and Songue, June and July. Two in the black, four in the mottled dress.

44. *FISCUS COLLARIS.*

*Fiscus collaris* (Linn.); Shelley, B. Afr. i. p. 51, no. 693.

*Lanius collaris*, Shelley, Ibis, 1893, p. 19; 1894, p. 15.

Kombi and Fort Hill (Masuku Range), July. Three adult specimens, all labelled females, which I believe to be incorrect, as the females of the genus *Fiscus* are always distinguishable by having a chestnut patch on the flanks, and none of these specimens have that mark.

45. *FISCUS SOUSÆ.*

*Lanius sousæ* (Bocage); Shelley, B. Afr. i. p. 52, no. 701; Gadow, Cat. viii. p. 254.

Nyika Plateau, June. An adult pair. These are the first adult specimens I have seen. The tail is long and much graduated, and the feathers are very narrow. The sexes only differ in the females having the flanks chestnut, and the species properly belongs to the genus *Fiscus*, where it was first placed by Prof. Barboza du Bocage. This is, I believe, the first record of the species being found beyond the limits of the Portuguese colony of Benguela.

## 46. LANIARIUS MOSAMBICUS.

*Laniarius mosambicus* (Fisch. & Reichen.); Shelley, B. Afr. i. p. 53, no. 723; id. Ibis, 1896, p. 235.

*Dryoscopus sticturus* (nec Hartl. & Finsch); Shelley, Ibis, 1893, p. 20.

*Dryoscopus mosambicus*, Shelley, Ibis, 1894, p. 16.

Kombi (Masuku Range), 7000 ft., and Songue, July. One adult and two immature specimens.

## 47. LANIARIUS NIGERRIMUS.

*Laniarius nigerrimus* (Reichen.); Shelley, B. Afr. i. p. 54, no. 733.

*Dryoscopus nigerrimus*, Reichen. Vög. Deutsch-Ost-Afr. p. 162.

Karonga, July. An adult male. This is the furthest south any of the three species of Black Bush-Shrikes have been met with.

## 48. DRYOSCOPIUS CUBLA.

*Dryoscopus cubla* (Shaw); Shelley, B. Afr. i. p. 55, no. 742; id. Ibis, 1893, p. 20, 1894, p. 16.

Nyika Plateau, June. An adult male and female.

## 49. BOCAGIA ANCHIETÆ.

*Bocagia anchietæ* (Bocage); Shelley, B. Afr. i. p. 55, no. 750.

*Telephonus anchietæ*, Shelley, Ibis, 1893, p. 20; 1894, p. 18.

*Telephonus minutus* (nec Hartl.); Reichen. Vög. Deutsch-Ost-Afr. p. 159.

Fort Hill, July. An adult female. This species ranges from Angola into Eastern Africa from the Zambesi (Nyasaland) to the Equator (Lamu), and its ally, *B. minuta*, ranges over the Congo and Gold Coast districts to the Upper White Nile. To which of these two belongs the Uganda bird (*Telephonus minutus*, Reichen. J. f. O. 1892, p. 39) I am unable to tell, not having seen a specimen from that locality. *B. anchietæ* is readily distinguished from *B. minuta* in having no black on the scapulars. The females of both species are distinguished from their respective males by having a broad white eyebrow.

## 50. TELEPHONUS SENEGALUS.

*Telephonus senegalus* (Linn.); Shelley, B. Afr. i. p. 55, no. 751; id. Ibis, 1893, p. 20, 1894, p. 18, 1896, p. 236.

Nyika Plateau, June; Karonga and Songue, July; Zomba, August. Four specimens.

## 51. MALACONOTUS SULPHUREIPECTUS.

*Malaconotus sulphureipectus* (Less.); Shelley, B. Afr. i. p. 56, no. 769.

*Laniarius sulphureipectus*, Shelley, Ibis, 1893, p. 20; 1894, p. 16.

Wyie River, June. An adult female.

## 52. MALACONOTUS BLANCHOTI.

*Malaconotus blanchoti*, Steph.; Shelley, B. Afr. i. p. 57, no. 778; id. Ibis, 1896, p. 182.

*Laniarius poliocephalus* (nec Licht.); Shelley, Ibis, 1894, p. 16.

Nyika Range, 4000 ft., June. An adult male.

## 53. CRATEROPUS KIRKI.

*Crateropus kirki*, Sharpe; Shelley, B. Afr. i. p. 58, no. 795; id. Ibis, 1893, p. 13, 1894, p. 11.

Nyika Plateau, June; and Kondowe, July. An adult male and a young bird.

## 54. PYCNONOTUS LAYARDI.

*Pycnonotus layardi*, Gurney; Shelley, B. Afr. i. p. 60, no. 830; id. Ibis, 1893, p. 13, 1894, p. 468, 1896, p. 232.

Nyika Plateau, June; Kombi, 7000 ft., and Fort Hill, July. Four specimens.

## 55. ANDROPADUS MASUKUENSIS, sp. n.

Masuku Range, 7000 ft., July. Two males and a female.

Upper parts uniform yellowish green, with the shafts of the tail-feathers and quills, and the inner webs of most of the latter, brownish black; sides of the head like the upper part; throat and under surface of the body paler, under surface of the shafts of the tail-feathers nearly white; under wing-coverts and inner margins of the quills pale whitish yellow: bill with the upper mandible blackish and the under mandible pale; legs dusky.

♂. Total length 6·7 inches, culmen 0·55, wing 3·2, tail 3·2, tarsus 0·85.

♀. Total length 7 inches, culmen 0·55, wing 3·3, tail 3·2, tarsus 0·85.

This species belongs to that group of the genus *Andropagus* with no moustachial streak and no yellow under tail-coverts.

- a. Upper parts uniform green with no rufous shade on the tail.
- a'. Larger: wing 3·8 inches ..... *A. montanus*.
- b'. Smaller: wing 3·2 to 3·3 inches; bill not serrated ..... *A. masukuensis*.
- b. With a rufous shade on the tail.
- c'. Wing not less than 3 inches.
- a<sup>2</sup>. Under wing-coverts and inner edges of quills yellow; wing 3·45 inches; bill generally but not always serrated .... *A. importunus*.
- b<sup>2</sup>. Under wing-coverts olive-yellow, like the breast; inner margins of quills brownish white ..... *A. zombensis*.
- d'. Wing less than 3 inches ..... *A. virens* and *minor*.

#### 56. CRINIGER PLACIDUS.

*Criniger placidus* (Shelley); id. B. Afr. i. p. 63, no. 876; id. Ibis, 1896, p. 179.

*Xenocichla placida*; Shelley, Ibis, 1894, p. 10.

*Phyllostrephus placidus*, Reichen. Vög. Deutsch-Ost-Afr. p. 206.

Kombi and Songue, July. A male and female. This species ranges northward to Kilimanjaro.

#### 57. CRINIGER OLIVACEICEPS.

*Criniger olivaceiceps*, Shelley, Ibis, 1896, p. 179.

Kombi (Masuku Plateau), 7000 ft., July. One female. This appears to be a local common Nyasaland bird.

#### 58. CRINIGER FUSCICEPS.

*Criniger fusciceps* (Shelley); id. B. Afr. i. p. 63, no. 880; id. Ibis, 1869, p. 232.

*Xenocichla fusciceps*, Shelley, Ibis, 1893, p. 13; 1894, p. 10, pl. i. fig. 2, p. 468.

Nyika Plateau and at mouth of Wyie River in North Nyasa. Five specimens, showing that the sexes are similar



in plumage. Like the last species, it appears to be plentiful in Nyasaland, but has not been recorded from anywhere else.

59. PHYLLOSTROPHUS CERVINIVENTRIS.

*Phyllostrophus cerviniventris*, Shelley, Ibis, 1894, p. 10, pl. ii. fig. 1; id. B. Afr. i. p. 65, no. 901.

Nyika Plateau and Karonga, June and July. Two males and two females perfectly similar in plumage.

60. SYLVIELLA LEUCOPSIS.

*Sylviella leucopsis*, Reichen. Orn. Centralbl. 1879, p. 114; id. Vög. Deutsch-Ost-Afr. p. 223.

*Sylviella whytii*, Shelley, Ibis, 1894, p. 13; id. B. Afr. i. p. 70, no. 968.

Fort Hill and Miniwandi on Tanganyika Plateau, July. Two specimens. This species ranges from Nyasaland to Manda Island.

61. CRYPTOLOPHA RUFICAPILLA.

*Cryptolopha ruficapilla* (Sundev.); Shelley, B. Afr. i. p. 70, no. 975; Sharpe, Cat. iv. p. 400, pl. xii. fig. 1.

*Pindalus ruficapillus*, Sharpe, B. S. Afr. pp. 302, 829.

Kombi, on the Masuku Range, 7000 ft., July. A single specimen. This is the first time the species has been recorded from north of the Zambesi.

62. CISTICOLA NIGRILORIS, sp. n. (Plate XII. fig. 2.)

Kombi (Masuku Range, 7000 ft.), July. A male and two females.

Upper surface uniform brown, slightly paler on the rump, and with narrow rufous edges to the quills and tail-feathers; forehead, crown, and nape deep tawny rufous, with the sides of the forehead, eyelids, and in front of the eye black; cheeks, ear-coverts, throat, and a central line down the body uniform tawny-shaded white; the upper parts of the ear-coverts inclining to rufous, and the sides of the body and the under tail-coverts ashy brown; thighs tawny buff; tail with a broad black subterminal bar and pale ends. Bill black, with only a small portion of the keel pale; legs pale rufous brown.

♂. Total length 6.95 inches, culmen 0.55, wing 2.75, tail 3, tarsus 1.05.

♀. Total length 6.3 inches, culmen 0.6, wing 2.8, tail 3.3, tarsus 1.05.

This species may be readily recognized by its short black bill and the absence of any pale colouring in front or over the eye.

It belongs to that group of *Cisticola* which has the back uniform, tail with a dark subterminal bar, and the head with a rufous cap.

- a. Quills with their outer edges ashy brown . . . . . (*C. ruficapilla*,  
*emini*, *rufopileata*, *chubbi*, and *angusticauda*.)
- b. Quills edged with rufous.
- a'. Quills only narrowly edged with rufous . . . . . *C. nigriloris*.
- b'. Rufous on quills forms a conspicuous wing-patch. *C. cinerascens*.

#### 63. CISTICOLA CINERASCENS.

*Cisticola cinerascens* (Heugl.); Shelley, B. Afr. i. p. 75, no. 1051; id. Ibis, 1893, p. 15, 1894, p. 12.

Nyika Plateau, June. A male and female.

#### 64. SCHÆNICOLA APICALIS.

*Schænicola apicalis* (Licht.); Shelley, B. Afr. i. p. 77, no. 1077; id. Ibis, 1894, p. 12.

Nyika Plateau, June. A female.

#### 65. BRADYPTERUS BRACHYPTERUS.

*Bradypterus brachypterus* (Vieill.); Shelley, B. Afr. i. p. 77, no. 1078; id. Ibis, 1894, p. 12.

Kombi, July. One female. This species ranges over Africa south from Nyasaland and Benguela.

#### 66. EURYPTILA BABÆCULA.

*Euryptila babæcula* (Vieill.); Shelley, B. Afr. i. p. 78, no. 1086.

*Bradypterus babæculus*, Reichen. Vög. Deutsch-Ost-Afr. p. 223.

*Luscinola gracilirostris* (Hartl.); Seebohm, Cat. v. p. 122.

*Bradypterus gracilirostris*, Sharpe, B. S. Afr. pp. 287, 825.

Karonga, July. A female.

## 67. ERYTHROPYGIA BARBATA.

*Erythropygia barbata* (Finsch & Hartl.); Shelley, B. Afr. i. p. 82, no. 1143.

*Cossypha barbata*, Sharpe, Cat. v. ii. p. 43; id. B. S. Afr. pp. 227, 817.

Fort Hill, July. An adult female.

This is the most eastern locality known for the species. The type was discovered in Benguela by Mr. Anchieta, and Capt. Storme procured it near Lake Tanganyika. According to Dr. Reichenow (Vög. Deutsch-Ost-Afr. p. 228), *E. quadrivirgata* is the species found in E. Africa from Kakoma to the Pangani, and it is an interesting fact that the latter species has also been found by Mr. Whyte at Tshiramo, in Nyasaland (Ibis, 1894, p. 11).

The three closely allied species may be easily recognized by the following key:—

- a. Outer tail-feathers only tipped with white. . . . . *E. leucosticta*.
- b. Outer tail-feathers with broad white ends.
  - a'. Terminal one-third of outer tail-feather white. Slightly darker; a very distinct black band on each side of the crown . . . . . *E. quadrivirgata*.
  - b'. Terminal two-thirds of outer tail-feather white. Slightly paler; dark band on sides of crown incomplete . . . . . *E. barbata*.

## 68. CICHLADUSA ARCUATA.

*Cichladusa arcuata*, Peters; Shelley, B. Afr. i. p. 84, no. 1160; id. Ibis, 1894, p. 11.

Karonga, June. A pair; sexes perfectly similar.

## 69. COSSYPHA NATALENSIS.

*Cossypha natalensis*, Smith; Shelley, B. Afr. i. p. 84, no. 1164; id. Ibis, 1893, p. 14.

Karonga and Kombi, June and July. An adult male and female, perfectly similar to each other, and an immature bird.

## 70. COSSYPHA CAFFRA.

*Cossypha caffra* (Linn.); Shelley, B. Afr. i. p. 84, no. 1165; id. Ibis, 1893, p. 14, 1896, p. 180.

Nyika Plateau, June. Three males and three females, all similar in plumage.



2.

1. *LESSONORNIS MODESTA*. 2. *CISTICOLA NIGRILORIS*.

Mintern Bros. imp.

71. *COSSYPHA HEUGLINI*.

*Cossypha heuglini*, Hartl. ; Shelley, B. Afr. i. p. 84, no. 1171 ; id. Ibis, 1893, p. 14, 1894, p. 11.

Nyika Plateau, June. One female.

72. *BESSONORNIS MODESTA*, sp. n. (Plate XII. fig. 1.)

Karonga, July. A female.

Upper parts uniform ashy brown, with the rump, upper tail-coverts, and tail cinnamon-rufous; centre tail-feathers dark brown, with base and broad edges cinnamon, the remainder of the tail-feathers with dark-brown ends, much broader on the outer than on the inner webs; wings darker brown than the back and with narrow pale edges to the feathers; ear-coverts brown, with a slight chestnut shade; lores, a narrow edging to the forehead, cheeks, throat, abdomen, thighs, and under tail-coverts white, shading into very pale ashy brown on the crop, fore-chest, and sides of body; axillaries and under wing-coverts nearly white, inner margins of quills cinnamon tinted white. Bill and legs black. Total length 6 inches, culmen 0.55, wing 3.3, tail 2.5, tarsus 1.

This species comes into the genus *Bessonornis*, according to the List (B. Afr. i. pp. 84, 85), based upon the following key:—

- a. Tail never bright yellow, or white, with a dark terminal band and dark centre feathers.
  - a'. Outstretched feet do not reach to the tip of the tail.
    - a<sup>2</sup>. With no complete dark terminal band to the tail.
      - a<sup>3</sup>. Tail chestnut, with the centre pair of feathers entirely black or brown . . . . . *Cossypha*.
      - b<sup>3</sup>. Tail entirely of one colour, or with white ends to some of the outer feathers . . . . . *Neocossyphus*.
    - b<sup>2</sup>. With a complete dark terminal bar to the tail, which is otherwise rufous, with the centre pair of feathers black or brown.
      - c<sup>3</sup>. Bill broad; rictal bristles strongly developed; centre tail-feathers with the basal portion rufous . . . . . *Pseudocossyphus*.
      - d<sup>3</sup>. Bill less broad; rictal bristles very slightly developed . . . . . *Bessonornis*.



## 73. PRATINCOLA TORQUATA.

*Pratincola torquata* (Linn.); Shelley, B. Afr. i. p. 86, no. 1192; id. Ibis, 1893, p. 15, 1894, p. 12, 1896, p. 231.

Nyika Plateau and Kombi, June and July. Five specimens.

## 74. TARSIGER JOHNSTONI.

*Tarsiger johnstoni* (Shelley), Ibis, 1896, pp. 181, 234.

*Pogonocichla johnstoni*, Shelley, Ibis, 1893, p. 18; 1894, p. 14.

Nyika Plateau, Kombi, and Malosis, June and July. Ten specimens, all exactly similar, with the exception of one immature bird. This is one of the local forms; it has not yet been recorded from beyond the limits of Nyasaland, but appears to be common in that country.

## 75. TURDUS LITSITSIRUPA.

*Turdus litsitsirupa*, Smith; Shelley, B. Afr. i. p. 87, no. 1215; Sharpe, B. S. Afr. pp. 198, 813.

*Geocichla litsitsirupa*, Seebohm, Cat. v. p. 182.

Fort Hill, July. A female. This is, I believe, the first instance of the occurrence of this species north of the Zambesi.

## 76. TURDUS MILANJENSIS.

*Turdus milanjensis*, Shelley, Ibis, 1893, p. 12, 1894, p. 9, 1896, p. 231; id. B. Afr. i. p. 88, no. 1231.

Nyika Plateau, June. Two males and two females. "Bill and legs red" (*A. W.*). In the dried skin the bill is deep yellow and the legs pale brown. This bird is known only from Nyasaland and is represented by the nearest allied species, *T. cabanisi*, to the south of the Zambesi and *T. deckeni* in E. Africa.

- |   |                        |
|---|------------------------|
| a. Darker; upper throat white, strongly streaked with black ..... | <i>T. milanjensis.</i> |
| b. Paler; upper throat pale grey obscurely streaked with brown.   |                        |
| a'. Less rufous on the abdomen and under wing-coverts .....       | <i>T. cabanisi.</i>    |
| b'. More rufous on the abdomen and under wing-coverts .....       | <i>T. deckeni.</i>     |

77. *TURDUS LIBONIANUS*.

*Turdus libonianus* (Smith); Shelley, B. Afr. i. p. 88, no. 1234; id. Ibis, 1893, p. 12, 1894, pp. 9, 468; Reichen. Vög. Deutsch-Ost-Afr. p. 233.

Fort Hill, July. Two males and a female.

78. *MONTICOLA ANGOLENSIS*.

*Monticola angolensis*, Sousa; Shelley, B. Afr. i. p. 89, no. 1244; id. Ibis, 1896, p. 179.

Nyika Mountains, from 5000 to 7000 ft., June, and Fort Hill, July. Four males and two females adult and one immature female.

79. *SAXICOLA LIVINGSTONII*.

*Saxicola livingstonii* (Tristram); Shelley, B. Afr. i. p. 90, no. 1255; Reichen. Vög. Deutsch-Ost-Afr. p. 236, fig. 104.

*Saxicola pileata* (nec Gm.); Shelley, Ibis, 1894, p. 468.

Shores of Nyasa Lake, south of Karonga. One specimen. To the north of the Zambesi this species, probably, entirely replaces *S. pileata*. Southward from the Zambesi specimens gradually assume a paler and more sandy colouring, those in the British Museum from Tete, on the south bank of the Zambesi, being almost intermediate in colouring. The late Mr. Seebohm did not consider *S. livingstonii* to be distinct from the more southern *S. pileata*, and, I may add, it is known that the female does not differ in plumage from the male (Cat. v. p. 397).

80. *MELÆNORNIS ATER*.

*Melænornis ater* (Sundev.); Shelley, B. Afr. i. p. 93, no. 1299.

*Bradyornis ater*, Shelley, Ibis, 1893, p. 21; 1894, p. 18.

Shore of Nyasa Lake, south of Karonga. One specimen.

81. *BRADYORNIS MURINUS*.

*Bradyornis murinus*, Finsch & Hartl.; Shelley, B. Afr. i. p. 93, no. 1302; id. Ibis, 1894, p. 470.

Nyika Range, north of Mount Waller. A female.

## 82. MUSCICAPA CÆRULESCENS.

*Muscicapa cærulescens* (Hartl.); Shelley, B. Afr. i. p. 94, no. 1314; id. Ibis, 1894, p. 14.

Nyika Plateau. Two females. These two specimens agree perfectly with one from Zomba, and are slightly larger than any of the other specimens I have examined in the British Museum. They are probably examples of the *Muscicapa cinereola*, Finsch & Hartl. Vög. Ostaf. p. 302, pl. iv. fig. 1 (Cat. iv. p. 154).

## 83. ALSEONAX SUBADUSTA, sp. n.

*Alseonax adusta* (nec Boie); Shelley, Ibis, 1896, p. 181.

Nyika Plateau and Fort Hill on Tanganyika Flat, 4000 ft. A male and female similar in size and plumage.

Similar to *A. adusta*, but with the upper parts paler and greyer (ashy grey); underparts paler; white, with the sides of the throat and the crop with a pale, nearly uniform ashy shade; the basal two-thirds of the lower mandible pale, remainder of bill black. Total length 4.75 inches, culmen 0.35, wing 2.6, tail 2, tarsus 0.5.

- a. Upper parts ashy brown; sides of throat and the crop more streaked with ashy brown; basal one-third of mandible pale ..... *A. adusta*.  
 b. Upper parts ashy grey; sides of throat and the crop of a uniform ashy shade; basal two-thirds of mandible pale ..... *A. subadusta*.

## 84. PLATYSTEIRA PELTATA.

*Platysteira peltata* (Sundev.); Shelley, B. Afr. i. p. 97, no. 1357; id. Ibis, 1893, p. 18, 1894, pp. 14, 469.

Karonga, June. An adult bird.

## 85. PACHYPRORA DIMORPHA.

*Pachyprora dimorpha*, Shelley, Ibis, 1893, p. 18; id. B. Afr. i. p. 98, no. 1362.

Nyika Plateau. A female.

## 86. PACHYPRORA MOLITOR.

*Pachyprora molitor* (Hahn u. Küster); Shelley, B. Afr. i. p. 98, n. 1363; id. Ibis, 1893, p. 18, 1894, p. 15.

Nyika Plateau, June; Fort Hill and Kombi (Masuku

Range, 7000 ft.), July. Seven specimens. Nyasaland appears to be the most northern range for this species in E. Africa, if *Batis puella* is distinct.

#### 87. ELMINIA ALBICAUDA.

*Elminia albicauda*, Bocage; Shelley, B. Afr. i. p. 98, no. 1375; Sharpe, Cat. iv. p. 364; id. B. S. Afr. p. 838.

Nyika Plateau, June. A pair, perfectly similar and in beautiful condition. The species was hitherto known to me only by the description of the type, which came from Benguela.

#### 88. TROCHOCERCUS ALBONOTATUS.

*Trochocercus albonotatus*, Sharpe; Shelley, B. Afr. i. p. 99, no. 1381; id. Ibis, 1893, p. 19, 1894, p. 469.

Kombi, on the Masuku Range, 7000 ft., July. A single specimen. Mr. Whyte has now collected five specimens from three very different highland districts in Nyasaland, and, as the type came from a mountain near the Equator, one would have expected to find it mentioned in Dr. Reichenow's 'Vög. Deutsch-Ost-Afr.' This is a fair example of how much the student at home yet has to learn from the field-naturalist with regard to geographical distribution, habits, and migration.

#### 89. CAPRIMULGUS FOSSII.

*Caprimulgus fossii*, Hartl.; Shelley, B. Afr. i. p. 107, no. 1488; Hartert, Cat. xvi. p. 551; Sharpe, B. S. Afr. p. 803; Reichen. Vög. Deutsch-Ost-Afr. p. 140.

Karonga, July. A male. This species has a wide range, extending from the Gold Coast and Equator south to the Cunene and Limpopo Rivers.

#### 90. HAPALODERMA VITTATUM.

*Hapaloderma vittatum*, Shelley; id. B. Afr. i. p. 108, no. 1501; id. Ibis, 1896, p. 178.

Kombi, July. Two males and two females. This species is apparently confined to Eastern Africa, where it ranges from Kilimanjaro into Nyasaland.

91. *CORACIAS CAUDATUS*.

*Coracias caudatus*, Linn.; Shelley, B. Afr. i. p. 109, no. 1515; id. Ibis, 1863, p. 7.

Fort Hill and shores of Lake Nyasa. A male and two females. Very generally distributed (*A. W.*).

92. *MELITTOPHAGUS MERIDIONALIS*.

*Melittophagus meridionalis*, Sharpe; Shelley, B. Afr. i. p. 110, no. 1524; id. Ibis, 1863, p. 7, 1894, p. 5.

Karonga, July. Two females.

93. *RHINOPOMASTUS CYANOMELAS*.

*Rhinopomastus cyanomelas* (Vieill.); Shelley, B. Afr. i. p. 113, no. 1559; id. Ibis, 1893, p. 8, 1894, p. 6, 1896, p. 230.

Fort Hill, July. An adult male.

94. *BYCANISTES CRISTATUS*.

*Bycanistes cristatus* (Rüpp.); Shelley, B. Afr. i. p. 114, no. 1570; id. Ibis, 1896, p. 178.

Masuku Plateau, 7000 ft., July. A male and female. This species ranges over Eastern Africa from Nyasaland into Abyssinia.

95. *LOPHOCEROS MELANOLEUCUS*.

*Lophoceros melanoleucus* (Licht.); Shelley, B. Afr. i. p. 114, no. 1579; id. Ibis, 1893, p. 8, 1894, pp. 6, 467.

Songue and Karonga, July. A male and female.

96. *CERYLE RUDIS*.

*Ceryle rudis* (Linn.); Shelley, B. Afr. i. p. 115, no. 1599; id. Ibis, 1893, p. 8, 1894, p. 6.

Karonga, July. A female.

97. *CERYLE MAXIMA*.

*Ceryle maxima* (Pall.); Shelley, B. Afr. i. p. 116, no. 1600; id. Ibis, 1894, p. 5, 1896, p. 230.

Florence Bay and Monkey Bay, June. A male and female.

98. *CORYTHORNIS CYANOSTIGMA*.

*Corythornis cyanostigma* (Rüpp.); Shelley, B. Afr. i. p. 116, no. 1606; id. Ibis, 1894, p. 5.

Karonga, July. One male.

## 99. HALCYON ORIENTALIS.

*Halcyon orientalis*, Peters; Shelley, B. Afr. i. p. 117, no. 1618; id. Ibis, 1893, p. 8, 1894, p. 6, 1896, p. 230.

Karonga, July. An adult female.

## 100. HALCYON CHELICUTENSIS.

*Halcyon chelicutensis* (Stanl.); Shelley, B. Afr. i. p. 117, no. 1619; id. Ibis, 1893, p. 8, 1894, p. 6.

Songue, July. A male.

## 101. COLIUS STRIATUS.

*Colius striatus*, Gm.; Shelley, B. Afr. i. p. 118, no. 1633; id. Ibis, 1894, p. 7.

Nyika Plateau and Ukala Bay, June; Fort Hill, July. Two males and a female. This is the most northern range known for this species; it extends southward to Natal and Cape Colony.

## 102. TURACUS LIVINGSTONII.

*Turacus livingstonii*, Gray; Shelley, B. Afr. i. p. 119, no. 1643; id. Ibis, 1893, p. 9, 1894, pp. 7, 467, 1896, p. 230.

Nyika Plateau, June; and Kombi, July. Six specimens.

## 103. CEUTHMOCHARES AUSTRALIS.

*Ceuthmochares australis*, Sharpe; Shelley, B. Afr. i. p. 122, no. 1681; id. Cat. xix. p. 403; Sharpe, B. S. Afr. p. 161, pl. v. fig. 1; Reichen. Vög. Deutsch-Ost-Afr. p. 108.

Karonga, June. One female.

## 104. COCCYSTES CAFER.

*Coccytes cafer* (Licht.); Shelley, B. Afr. i. p. 123, no. 1696; id. Ibis, 1894, p. 7.

Karonga, June. A male.

## 105. INDICATOR INDICATOR.

*Indicator indicator* (Gm.); Shelley, B. Afr. i. p. 124, no. 1713; id. Ibis, 1894, pp. 8, 467.

Nyika Plateau and Songue, July. Two specimens.

## 106. INDICATOR MAJOR.

*Indicator major*, Steph.; Shelley, B. Afr. i. p. 125,



no. 1714; id. Cat. xix. p. 6; Sharpe, B. S. Afr. pp. 168, 810.

*Indicator böhmi*, Reichen.; id. Vög. Deutsch-Ost-Afr. p. 114.

Nyika Plateau. An adult female.

107. INDICATOR MINOR.

*Indicator minor*, Steph.; Shelley, B. Afr. i. p. 125, no. 1718; id. Cat. xix. p. 9; Sharpe, B. S. Afr. pp. 169, 811; Reichen. Vög. Deutsch-Ost-Afr. p. 114.

Nyika Mountains, 3000 ft., June. An adult female.

108. MELANOBUCCO MELANOPTERUS.

*Melanobucco melanopterus* (Peters); Shelley, B. Afr. i. p. 126, no. 1729; id. Cat. xix. p. 19.

*Pogonorhynchus melanopterus*, Reichen. Vög. Deutsch-Ost-Afr. p. 116.

Karonga, July. A male and three females. This is the most southern locality known for this species.

109. MELANOBUCCO TORQUATUS.

*Melanobucco torquatus* (Dumont); Shelley, B. Afr. i. p. 126, no. 1737; id. Cat. xix. p. 24.

*Pogonorhynchus torquatus*, Sharpe, B. S. Afr. pp. 172, 811.

Nyika Plateau and Karonga, June. A male and female. These specimens agree perfectly with Natal birds, and are from the furthest limits north for this species yet recorded.

110. BARBATULA EXTONI.

*Barbatula extoni*, Layard; Shelley, B. Afr. i. p. 128, no. 1768; id. Ibis, 1896, p. 178.

Nyika Plateau. An adult male. This bird is known to range from Nyasaland south to the Transvaal, and westward into Benguela.

111. CAMPOTHERA ABINGDONI.

*Campothera abingdoni* (Smith); Shelley, B. Afr. i. p. 131, no. 1808; id. Ibis, 1894, p. 9.

Nyika Plateau, June; Karonga, July. Two specimens. This is the most northern limit known for this species, which ranges south into Natal.

## 112. CAMPOTHERA BENNETTI.

*Campothera bennetti* (Smith); Shelley, B. Afr. i. p. 131, no. 1821; Hargitt, Cat. xviii. p. 102; Reichen. Vög. Deutsch-Ost-Afr. p. 121.

Fort Hill, July. An adult female. This Woodpecker ranges south into the Transvaal and westward to Lake Ngami.

## 113. DENDROPICUS ZANZIBARI.

*Dendropicus zanzibari*, Malh.; Shelley, B. Afr. i. p. 132, no. 1821; id. Ibis, 1893, p. 12, 1894, pp. 9, 467, 1896, p. 231.

*Dendropicus hartlaubi* (nec Malh.); Reichen. Vög. Deutsch-Ost-Afr. p. 122.

Fort Hill, July. A male and two females. This species ranges through Eastern Africa, from the Zambesi to the Equator, and westward to Angola and the Congo.

## 114. MESOPICUS GRISEOCEPHALUS.

*Mesopicus griseocephalus* (Bodd.); Shelley, B. Afr. i. p. 133, no. 1839; Hargitt, Cat. xviii. p. 371.

*Dendropicus menstruus*, Gray; Sharpe, B. S. Afr. pp. 191, 812.

Nyika Plateau and Kondowe on Mount Waller, June. Five specimens. This species ranges over Africa southward from Nyasaland and Benguela.

## 115. VINAGO DELALANDII.

*Vinago delalandii* (Bp.); Shelley, B. Afr. i. p. 134, no. 1854; id. Ibis, 1896, p. 238.

*Treron delalandii*, Shelley, Ibis, 1893, p. 28, 1894, pp. 23, 473.

Mpata, July. A female.

## 116. HAPLOPELIA JOHNSTONI.

*Haplopelis johnstoni*, Shelley; id. B. Afr. i. p. 136, no. 1871; id. Ibis, 1893, p. 28, pl. iii., 1894, pp. 24, 472.

Nyika Plateau, June; Karonga, July. Two males. The present species is known only from Nyasaland, where it appears to be plentiful.

## 117. TURTUR SEMITORQUATUS.

*Turtur semitorquatus* (Rüpp.); Shelley, B. Afr. i. p. 136, no. 1878; id. Ibis, 1893, p. 28, 1894, p. 24, 1896, p. 238.

Fort Hill, July. Two specimens.

## 118. TURTUR DAMARENSIS.

*Turtur damarensis*, Finsch & Hartl.; Shelley, B. Afr. i. p. 137, no. 1884; Salvad. Cat. xxi. p. 426; Reichen. Vög. Deutsch-Ost-Afr. p. 69.

*Turtur capicola* (nec Sundev.); Shelley, Ibis, 1893, p. 28, 1894, p. 24.

Fort Hill, July. Two adults and one immature bird.

## 119. TURTUR SENEGALENSIS.

*Turtur senegalensis* (Linn.); Shelley, B. Afr. p. 137, no. 1887; Salvad. Cat. xxi. p. 449; Sharpe, B. S. Afr. pp. 568, 854; Reichen. Vög. Deutsch-Ost-Afr. p. 681.

Karonga, July. A female.

## 120. CHALCOPELIA AFRA.

*Chalcopelia afra* (Linn.); Shelley, B. Afr. i. p. 137, no. 1895; id. Ibis, 1894, pp. 24, 472.

Songue, July. A male.

## 121. TYMPANISTRIA TYMPANISTRIA.

*Tympanistria tympanistria* (Temm. & Knip); Shelley, B. Afr. i. p. 138, no. 1896; id. Ibis, 1893, p. 29, 1894, p. 472.

Nyika Plateau, June. Male and female adult; the latter is distinguished by a dusky shade on the throat.

## 122. CENA CAPENSIS.

*Cena capensis* (Linn.); Shelley, B. Afr. i. p. 138, no. 1897; Salvad. Cat. xxi. p. 501; Sharpe, B. S. Afr. pp. 572, 854; Reichen. Vög. Deutsch-Ost-Afr. p. 71.

Karonga, June. A female.

## 123. PŒOCEPHALUS FUSCICAPILLUS.

*Pœocephalus fuscicapillus* (Verr. & Des Murs); Shelley, B. Afr. i. p. 139, no. 1906; id. Ibis, 1893, p. 12, 1894, p. 9.

Monkey Bay, July. An adult female.

## 124. SYRNIUM WOODFORDI.

*Syrnium woodfordi* (Smith); Shelley, B. Afr. i. p. 142, no. 1945; id. Ibis, 1894, p. 3.

Nyika Plateau and Karonga, July. Two females; the former is considerably paler and smaller than the latter.

## 125. GLAUCIDIUM PERLATUM.

*Glaucidium perlatum* (Vieill.); Shelley, B. Afr. i. p. 142, no. 1948; id. Ibis, 1894, p. 4.

Mpata, 3000 ft., June. A male.

## 126. SCOTOPELIA PELI.

*Scotopelia peli*, Temm.; Shelley, B. Afr. i. p. 144, no. 1971; id. Ibis, 1894, p. 465; Reichen. Vög. Deutsch-Ost-Afr. p. 97.

Karonga, July. A male and female.

## 127. FALCO RUFICOLLIS.

*Falco ruficollis*, Swains.; Shelley, B. Afr. i. p. 145, no. 1982; Sharpe, Cat. i. p. 404; id. B. S. Afr. pp. 60, 800; Reichen. Vög. Deutsch-Ost-Afr. p. 95.

Karonga, July. A female.

## 128. ERYTHROPUS DICKINSONI.

*Erythropus dickinsoni* (Sclat.); Shelley, B. Afr. i. p. 145, no. 1989.

*Falco dickinsoni*, Shelley, Ibis, 1894, p. 464; Reichen. Vög. Deutsch-Ost-Afr. p. 95.

Fort Hill and shores of Lake Nyasa, 20 miles south of Karonga, June. Found nesting among the fronds of the tall palms (*A. IV.*). The two specimens sent are labelled male and female, and are very similar. This Falcon ranges from Nyasaland, north to the Rovuma River, and westward into Benguela.

## 129. HALIAËTUS VOCIFER.

*Haliaëtus vocifer* (Daud.); Shelley, B. Afr. i. p. 148, no. 2014; id. Ibis, 1894, pp. 3, 464; Reichen. Vög. Deutsch-Ost-Afr. p. 90.

Karonga, July. A fine adult male.

## 130. NISAËTUS SPILOGASTER.

*Nisaëtus spilogaster* (Bp.); Shelley, B. Afr. i. p. 149, no. 2026; Sharpe, Cat. i. p. 252; id. B. S. Afr. pp. 38, 797. Karonga, July. A male.

## 131. SPIZAËTUS CORONATUS.

*Spizaëtus coronatus* (Linn.); Shelley, B. Afr. i. p. 149, no. 2029; Sharpe, Cat. i. p. 266; id. B. S. Afr. p. 39.

Nyika Plateau, July. "This was the only specimen of this grand Eagle we met with. It had just lunched off a young Clip-springer Antelope, and was gorged" (*A. W.*). The species is known to range over the whole of South and West Africa to as far north as Senegambia, but has not, I believe, been recorded from Eastern Africa north of Nyasaland.

## 132. LOPHOAËTUS OCCIPITALIS.

*Lophoaëtus occipitalis* (Daud.); Shelley, B. Afr. i. p. 149, no. 2030; id. *Ibis*, 1893, p. 6, 1894, p. 2, 1896, p. 229.

Karonga, June. A male and female.

## 133. BUTEO AUGUR.

*Buteo augur*, Rüpp.: Shelley, B. Afr. i. p. 150, no. 2032; Sharpe, Cat. i. p. 175; Reichen. Vög. Deutsch-Ost-Afr. p. 93.

Masuku Plateau, 7000 feet, July. The collection contains a female and a young bird. The latter was taken from its nest, in a tall tree, when only a few days old, and grew very rapidly during the two weeks it was kept alive (*A. W.*). This fine Buzzard ranges from Nyasaland, throughout Eastern Africa, to Abyssinia.

## 134. ASTUR POLYZONOIDES.

*Astur polyzonoides* (Smith); Shelley, B. Afr. i. p. 152, no. 2060; id. *Ibis*, 1894, pp. 2, 464.

Zomba, August. A female.

## 135. ASTUR TACHIRO.

*Astur tachiro* (Daud.); Shelley, B. Afr. i. p. 152, no. 2062; Sharpe, Cat. i. p. 99; id. B. S. Afr. p. 20; Reichen. Vög. Deutsch-Ost-Afr. p. 88.

Nyika Mountain, June. An immature female.

## 136. NEOPHRON PILEATUS.

*Neophron pileatus* (Burchell); Shelley, B. Afr. i. p. 155, no. 2097; Sharpe, Cat. i. p. 18; id. B. S. Afr. pp. 7, 794; Reichen. Vög. Deutsch-Ost-Afr. p. 81.

Nyika Plateau, July. This Vulture is uncommon on the Plateau (*A. W.*). The collection contains two fine specimens.

## 137. IBIS ÆTHIOPICA.

*Ibis æthiopica* (Lath.); Shelley, B. Afr. i. p. 155, no. 2098; id. Ibis, 1894, p. 477.

Fort Johnston, July. An adult male.

## 138. HAGEDASHIA HAGEDASH.

*Hagedashia hagedash* (Lath.); Shelley, B. Afr. i. p. 156, no. 2104; Sharpe, Cat. xxvi. p. 19; id. B. S. Afr. p. 739.

*Theristicus leucocephalus* (Gm.); Reichen. Vög. Deutsch-Ost-Afr. p. 55.

Karonga, June; Songue, July. A male and female.

## 139. ARDEA MELANOCEPHALA.

*Ardea melanocephala*, Vig. & Child.; Shelley, B. Afr. i. p. 157, no. 2121; id. Ibis, 1894, p. 27.

Karonga, July. A female.

## 140. ARDEA PURPUREA.

*Ardea purpurea*, Linn.; Shelley, B. Afr. i. p. 157, no. 2123; id. Ibis, 1894, p. 27, 1896, p. 238.

Karonga, July. An immature bird.

## 141. ANASTOMUS LAMELLIGERUS.

*Anastomus lamelligerus*, Temm.; Shelley, B. Afr. i. p. 159, no. 2143; id. Ibis, 1894, p. 476, 1896, p. 240.

Karonga, July. An adult female.

## 142. PHALACROCORAX AFRICANUS.

*Phalacrocorax africanus* (Gm.); Shelley, B. Afr. i. p. 160, no. 2153; id. Ibis, 1894, p. 28.

Lake Nyasa, June. An adult male.

## 143. PLOTUS LEVAILLANTI.

*Plotus levillanti*, Licht.; Shelley, B. Afr. i. p. 161, no. 2154; id. Ibis, 1894, p. 28.

Songue, July. An immature male.



144. *DENDROCYCNA FULVA*.

*Dendrocygna fulva* (Gm.); Shelley, B. Afr. i. p. 171, no. 2260; Salvad. Cat. xxvii. p. 149; Shelley, Ibis, 1894, p. 28.

*Dendrocygna major*, Scat.; Shelley, Ibis, 1894, p. 477.  
Songue, July. A female.

145. *TURNIX LEPURANA*.

*Turnix lepurana* (Smith); Shelley, B. Afr. i. p. 178, no. 2324; id. Ibis, 1894, p. 25.

Ruarwe, June; and Karonga, July. Eight specimens.

146. *TURNIX NANA*.

*Turnix nana* (Sundev.); Shelley, B. Afr. i. p. 178, no. 2325; id. Ibis, 1894, p. 473.

Karonga, July. One male. This species ranges over Southern Africa, north to Nyasaland, on the east side of the continent, and has been procured at Accra, on the Gold Coast.

147. *COTURNIX DELEGORGUEI*.

*Coturnix delegorguei*, Deleg.; Shelley, B. Afr. i. p. 179, no. 2332; Grant, Cat. xxii. p. 243; Sharpe, B. S. Afr. p. 605; Reichen. Vög. Deutsch-Ost-Afr. p. 79.

Karonga, July. A male.

148. *PTERNISTES CRANCHI*.

*Pternistes cranchi* (Leach); Shelley, B. Afr. i. p. 179, no. 2338; Grant, Cat. xxii. p. 178; Reichen. Vög. Deutsch-Ost-Afr. p. 77.

Kondowe Mission Station, between the Mount Waller and Nyika ranges, June. An adult male and female, and two chicks. And from the Masuku Mountains an adult bird. This species ranges over the Congo district, south-eastward to Lake Nyasa, and north-eastward to Bukoba in Uganda.

149. *FRANCOLINUS SHELLEYI*.

*Francolinus shelleyi*, Grant; Shelley, B. Afr. i. p. 181, no. 2366; id. Ibis, 1894, p. 473.

Nyika Plateau, June. A female, not quite adult. It

differs from the male and female previously procured by Mr. Whyte, and the type, in having the bars on the breast much narrower; but as the specimen is not quite in full plumage I should hesitate to call it a local race. *Range*: Eastern portion of S. Africa, from Natal to Nyasaland.

150. *FRANCOLINUS JOHNSTONI*.

*Francolinus johnstoni*, Shelley; id. B. Afr. i. p. 182, no. 2379; id. Ibis, 1894, p. 24; 1896, p. 184.

Nyika Plateau. Five males and four females. The slight characters which separate this species from *F. hildebrandti* appear to be quite constant, and it is apparently confined to Nyasaland.

151. *CHARADRIUS PECUARIUS*.

*Charadrius pecuarius*, Temm.; Shelley, B. Afr. i. p. 189, no. 2467; id. Ibis, 1894, p. 474.

Shores of Lake Nyasa, Songue, and Karonga, June and July. Three males and a female.

152. *CHARADRIUS PALLIDUS*.

*Charadrius pallidus*, Strickl.; Shelley, B. Afr. i. p. 189, no. 2468.

*Ægialitis pallida*, Sharpe, Cat. xxiv. p. 284.

*Charadrius tenellus*, Hartl.; Reichen. Vög. Deutsch-Ost-Afr. p. 34.

Shores of Nyasa Lake, June; and Karonga, July. A male and female. This species ranges from the Zambesi to Sindi in Eastern Africa, and from Angola to the Gold Coast in W. Africa.

153. *TOTANUS GLAREOLA*.

*Totanus glareola* (Linn.); Shelley, B. Afr. i. p. 192, no. 2491; id. Ibis, 1894, pp. 27, 476.

Karonga, June. A female.

154. *CURSORIUS TEMMINCKI*.

*Cursorius temmincki*, Swains.; Shelley, B. Afr. i. p. 194, no. 2517; Sharpe, Cat. xxiv. p. 41.

*Cursorius senegalensis*, Licht.; Sharpe, B. S. Afr. p. 654; Reichen. Vög. Deutsch-Ost-Afr. p. 32.

Karonga, June. A male.

## 155. RHINOPTILUS CHALCOPTERUS.

*Rhinoptilus chalconotus* (Temm.); Shelley, B. Afr. i. p. 195, no. 2523.

*Cursorius chalconotus*, Shelley, Ibis, 1894, pp. 25, 474.  
Nyika Hills, 4000 feet, June. A female.

XL.—*Birds'-nesting in and around Lucknow. Additional Notes taken in the Season of 1896.* By WILLIAM JESSE.

SINCE writing my former article, which appeared in 'The Ibis,' 1896, pp. 185-198, I have found several species breeding near Lucknow which are not mentioned in that list. In my later labours I have been most materially helped by Mr. P. J. Lucas of this station, who not only takes a great personal interest in ornithology, but possesses a very intimate acquaintance with the language and customs of the natives. By his help I have been able to get the villagers to keep a look-out for nests and to bring in word, and I have thus obtained the eggs of several birds which I had previously sought in vain.

AQUILA VINDHIANA (Franklin). Indian Tawny Eagle.

*Hind.* [*Lucknow*]: Wokháb.

This Eagle is common in Lucknow, and may often be seen mingling with the Kites and Vultures over the busiest parts of the city. Europeans here call it the Lugger, while the true Lugger is named the Pigeon-Hawk.

In the month of January I saw two nests of this bird, both at the very top of tall mango-trees on the outskirts of the station. One contained two eggs on the point of hatching, the other a half-fledged young one. The eggs are similar to those of the House-Kite (*Milvus forficatus*), but are of course much larger.

The Wokháb makes a large nest of sticks, and lines it with leaves. It is placed at the extreme tip of some large branch, and not in a thick fork, as is the case with Kites.